# **Design Memorandum No. 10-2005**

TO:	Engineering Offices and Divisions Districts Consulting Engineers	
FROM:	Mark S. Gaydos, P.E Design Engineer	Design Manual Reference:
DATE:	October 13, 2005	Section II-03.10 and Design Memorandum No. 06-2005
SUBJECT:	DETERMINATION AND DISPOSITION OF ROADWAY DITCH WETLAND MITIGATION	Revision Supplemental

#### Introduction

The memorandum provides guidance on the determination and disposition of roadway ditch wetland mitigation.

# **Implementation**

The use of this guidance is to be implemented immediately.

This Design Memo replaces Design Memorandum No. 06-2005.

### Guidance

Executive Order 11990 (EO), "Protection of Wetlands," requires that federal agencies avoid the destruction of wetlands and in such cases as the destruction is deemed unavoidable or impractical that the wetlands be mitigated by replacement. This federal requirement includes NDDOT construction projects which have federal participation.

The attached information provides definition criteria for those wetlands which will be covered by the EO.

#### **Questions**

Any questions regarding the content or implementation of the memorandum should be referred to Ron Henke, Design Division, 701-328-4445.

# **Approved**

/s/	_10/13/05
Francis G. Ziegler, P.E Director, Office of Project Development	Date

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#### **MEMO**

September 29, 2005

To: Allen R. Radliff

FHWA, Division Administrator

From: Grant Levi

NDDOT, Deputy Director for Engineering

Re: Determination and Disposition of Roadway Ditch Wetland Mitigation

Executive Order 11990 (EO), "Protection of Wetlands," requires that federal agencies avoid the destruction of wetlands and in such cases as the destruction is deemed unavoidable or impractical that the wetlands be mitigated by replacement. This federal requirement includes NDDOT construction projects which have federal participation.

Definition criteria for those wetlands which will be covered by EO are detailed in section 5 of the EO:

"In carrying out the activities described in Section 1 of this Order, each agency shall consider factors relevant to a proposal's effect on the survival and quality of the wetlands. Among these factors are:

- a. public health, safety, and welfare, including water supply, quality, recharge and discharge; pollution; flood and storm hazards; and sediment and erosion;
- maintenance of natural systems, including conservation and long term productivity of existing flora and fauna, species and habitat diversity and stability, hydrologic utility, fish, wildlife, timber, and food and fiber resources;
- c. other uses of wetlands in the public interest, including recreational, scientific, and cultural issues."

Further definition lies in section 7, subsection c:

"The term "wetlands" means those areas that are inundated by surface or ground water with a frequency sufficient to support and under normal circumstances does or would support a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands generally include swamps, marshes, bogs, and similar areas such as sloughs, potholes, wet meadows, river overflows, mud flats, and natural ponds."

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The interpretation of Executive Order 11990 is that the wetlands requiring protection are "natural" wetlands. Many of the wetlands the NDDOT impacts in projects are wetlands that are contained within our current right of way, and are the result of our ditches not draining properly as they were intended to do. These wetlands that are the result of highway construction are wetlands that are "artificially created." Because these wetlands the Department has created are artificial, and not natural, EO 11990 does not apply and the Department will not mitigate for impacts to artificially created wetlands.

The following criteria will be used by the Department to identify created wetlands within existing NDDOT right-of-way:

- 1. Backslope If there is a backslope and a portion of wetland basin does not extend outside of the highway right-of-way there is a very high probability that the entire ditch has been manipulated and any wetland found in the ditch at such a location will be identified as an artificially created wetland. Wetland basins in the road right-of-way where the ditch does not have a backslope are likely naturally occurring prairie pothole wetlands. If these basins are affected by highway construction activities mitigation is required.
- 2. Original Plans The original highway construction plans typically identified the larger natural wetlands and contain flow arrows that indicate the direction a ditch was intended to drain. Current wetlands located entirely in the ditches that are not identified on the original plans and were indicated to drain by the original plans will be identified as artificially created wetlands.
- Landscape If a wetland is entirely in the right-of-way, appears to be constructed and is not part of an adjacent natural wetland outside of the right of way, it will be identified as artificially created.
- 4. National Wetlands Inventory Maps If the wetland type listed on the NWI maps ends with an "x", the wetland is excavated. If the wetland is excavated and inside the existing NDDOT right-of-way the wetland may be identified as artificially created. Artificially created or excavated wetlands in the highway right-of-way are typically linear wetlands. Created wetlands in the highway right-of-way may be designated as temporary (PEMAx) or seasonal (PEMCx) wetlands on the NWI maps.

The person making the identification of artificially created wetlands will use as many of the four criteria that are listed above as they have available to them. The latest guidance given in the Design Manual or by Design Memorandum provides criteria that will be followed to determine the type of delineation (field vs. office) that will be conducted.

This memo does not apply to USACE jurisdictional wetlands. If USACE determines that an artificially created wetland is jurisdictional, NDDOT may be required to mitigate for impacts.

This memo does not apply to artificially created wetlands that were intentionally created as wetland mitigation. If a created wetland was created for mitigation purposes, impacts to that wetland will need to be mitigated.

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If approved by NDDOT and FHWA, the policy would be implemented immediately.

Recommended for Approval: Yes No	
Francis Ziegler - Director, Office of Project Development	9/29/05 Date
Approval: Yes No	
Grant Levi – Deputy Director for Engineering	9/29/05 Date
Grant Levi – Deputy Director for Engineering	Date
Approval: Yes No	
Allan R. Radliff – Division Administrator, FHWA	10 (3/05 Date